ABSTRACT

PEG-IFN-β conjugates, where a PEG moiety is covalently bound to Cys^{17} of human IFN-β, are produced by a process of site specific PEGylation with a thiol reactive PEGylating agent. A pharmaceutical composition and a method for treating infections, tumors and autoimmune and inflammatory diseases are also provided. The invention further relates to a method for the stepwise attachment of PEG moieties in series to a polypeptide, and more particularly to IFN-β.